

Attorney Docket: 381AS/49211

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ATSUSHI KANKE ET AL.

Serial No.: 09/653,168

Group Art Unit: 2855

Filed: SEPTEMBER 1, 2000

Examiner: C. DICKENS

Title: HOT-WIRE TYPE AIR FLOW METER FOR INTERNAL  
COMBUSTION ENGINE

REPLY UNDER 37 CFR § 1.111

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The following is responsive to the Office Action mailed on December 21, 2001.

The rejection of Claims 1-33 as being anticipated by Suzuki et al. under 35 USC § 102(b) is traversed, and reconsideration is requested.

The Office Action references col. 5, lines 25-45 of Suzuki et al. as support for the teaching of "where a liquid droplet is deposited onto said resistor film." No such teaching is present in the referenced section of Suzuki et al.

Nor does the Examiner provide the slightest support in Suzuki et al. for the last seven lines in paragraph 3 of the Office Action. Nor does the Office Action explicate how the resistance element conductors 6A, 6B of Suzuki et al. constitute a changing means responsive to the temperature of a liquid droplet or measuring fluid.

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Suzuki et al. provide a hot film type air flow meter to improve the radio interference resistance. For that purpose, a shield electrode resistance element forming a grounded thin film type conductor 7A surrounds an air flow rate detecting resistance element to prevent erroneous operation due to the radio interference. Suzuki et al. do not teach or suggest that, in order to prevent excessive heating of a hot-wire type resistor (exothermic resistor portion) at the operation state other than a normal operation state such as a state where a liquid drop, etc., is deposited onto the exothermic resistor portion thereby to prevent the deterioration or breakage of the exothermic resistor portion, the applied voltage or current to the resistor film is limited to a value smaller than a voltage or current which is applied to the resistor film at the time of measuring a maximum specified measuring. Indeed, the thin film type conductor 7A of Suzuki et al. is an indispensable element for preventing radio interference, but is not a necessary element for achieving the objective of the present invention. The attached sketch illustrates this essential difference.

Accordingly, reconsideration of the rejection and favorable action on Claims 1-33 are earnestly solicited.

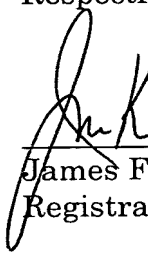
If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit  
Account No. 05-1323 (Docket #381AS/49211).

Respectfully submitted,

May 21, 2002

  
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